REMARKS

In the non-final Office Action, dated January 19, 2007, the Examiner rejected claims 1-41 under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent Application Publication No. 2005/0030949 (hereinafter "SHIRAKAWA").

By way of this amendment, Applicants have canceled claims 25-27 without prejudice or disclaimer. Claims 15 and 17 have been amended to improve form. Claims 1-24 and 28-41 are currently pending in the application. Reconsideration of the outstanding rejection of pending claims 1-24 and 28-41 is respectfully requested in view of the amendments above and the following remarks.

REJECTIONS UNDER 35 U.S.C. §102

In paragraph 2, the Office Action rejects claims 1-41 under 35 U.S.C. § 102(e) as allegedly being anticipated by SHIRAKAWA. Applicants respectfully traverse.

Independent claim 1, for example, recites a method of synchronizing routing data with another node in a network that includes receiving routing data; performing a function on at least a portion of the routing data to produce a first digest, where the first digest comprises substantially less data than the routing data; receiving a second digest from the other node; comparing the first and second digests to determine whether they are identical to produce first comparison results; and exchanging a portion of the routing data based on the first comparison results.

A proper rejection under 35 U.S.C. § 102 requires that a single reference teach every aspect of the claimed invention. See M.P.E.P. § 2131. SHIRAKAWA does not disclose or suggest the combination of features recited in Applicants' claim 1.

For example, SHIRAKAWA does not disclose or suggest, among other features, receiving a second digest from the other node; comparing the first and second digests to determine whether they are identical to produce first comparison results and exchanging a portion of the routing data based on the first comparison results, as recited in claim 1. The Office Action (pg. 2) relies on paragraphs 000-0124 of SHIRAKAWA for allegedly disclosing the features of claim 1. The most relevant

paragraphs of the paragraphs cited by the Office Action include paragraph [0039] and paragraphs [0050] through [0053].

At paragraph [0039] and paragraphs [0050] through [0053], SHIRAKAWA discloses:

> [0039] The digest generation unit 101 refers to a header portion of the entered packet, extracts a prescribed plurality of bit sequences (where a bit sequence may contain only 1 bit) from the header portion, and carries out a processing for generating a digest information of that packet by applying a pattern matching, logical calculations, etc., to the extracted plurality of bit sequences.
>
> [0050] Now, when the digest information is generated, the digest generation unit 101 transfers this digest information along with the corresponding packet to the packet processing unit 102.
> [0051] The packet processing unit 102 processes and outputs this packet by using the digest information that is provided along with the packet.
> [0052] For example, when the digest information is "00", this packet is processed by activating a UDP processing routine that is provided in advance (or by generating and activating a UDP processing routine at this point). The case where the digest information is "01" or "10" is handled similarly. When the digest information is "11", it is a packet classified as "others", so that the packet is processed while classifying the packet types as conventionally done, by activating a general packet processing routing.
> [0053] Also, the packet processing unit 102 carries out a processing for generating and outputting transfer control information including information specifying an output terminal (output interface) to which this packet should be outputted and information specifying a priority level for transmitting this packet, in the above described processing (or in the processing that is activated separately from the above described processing). The packet with the transfer control information attached thereto is then entered into the packet transmission unit 103.

These paragraphs of SHIRAKAWA disclose the use of a digest generation unit 101, at a single network node, that extracts sequences of bits from a packet header and generates digest information using the extracted sequences of bits. The digest information is then transferred, along with the corresponding packet, to a packet processing unit 102 of the network node. The packet processing unit 102 either processes the packet using a "UDP" processing routine, or a general packet processing routing routine, based on the digest information. The packet processing unit 102 additionally generates and outputs control information that specifies an output interface to which the

packet should be sent and information specifying a priority level for transmission of the packet. These paragraphs of SHIRAKAWA, therefore, disclose the processing of packets at a single node based on digest information generated for each of the packets. These paragraphs of SHIRAKAWA, however, do not disclose, or even suggest, receiving a second digest from another node, comparing first and second digests to determine whether they are identical to produce first comparison results or exchanging a portion of routing data based on the first comparison results, as recited in claim 1. The other portions of SHIRAKAWA referenced in the Office Action also do not disclose or suggest these features.

Since SHIRAKAWA does not disclose each and every feature of claim 1, SHIRAKAWA cannot anticipate claim 1. Withdrawal of the rejection of claim 1 under 35 U.S.C. § 102 is, therefore, respectfully requested.

Claims 2-7 depend from claim 1. These claims are not anticipated by SHIRAKAWA for at least the reasons set forth above with respect to claim 1. Furthermore, these claims recite additional features not disclosed or suggested by SHIRAKAWA. For example, claim 4 recites wherein the routing data comprises Open Shortest Path First (OSPF) advertisements. As another example, claim 5 recites receiving multiple third digests from the other node, where the multiple third digests identify multiple sub-portions of the routing data at the other node. As a further example, claim 7 recites comparing the multiple local digests with the multiple third digests to produce second comparison results and exchanging further portions of the routing data based on the second comparison results.

In rejecting these claims, the Office Action relies on the same sections of SHIRAKAWA, cited with respect to the rejection of claim 1, that span dozens of paragraphs and several pages. However, after reviewing the extensive sections of SHIRAKAWA cited by the Office Action, Applicants submit that these sections do not disclose, or even suggest, the above-noted features of claims 4, 5 and 7. If the Examiner persists in maintaining the rejection of these claims, Applicants respectfully request that the Examiner specifically point out where SHIRAKAWA allegedly discloses the above-noted features of claims 4, 5 and 7. Absent such a showing, Applicants request that the rejection of claims 4, 5 and 7 be withdrawn for at least these additional reasons.

Independent claim 8 recites similar features to (though possibly having different scope than) claim 1. Claim 8, therefore, is not anticipated by SHIRAKAWA for similar reasons to those set forth above with respect to claim 1.

Independent claim 9 recites similar features to (though possibly having different scope than) claim 1. Claim 9, therefore, is not anticipated by SHIRAKAWA for similar reasons to those set forth above with respect to claim 1.

Independent claim 10 recites a method for designating nodes as one of a master node or a slave node for synchronizing routing data in a network that includes subdividing routing data stored at a first node into multiple portions; counting the number of multiple portions to produce a first count; receiving a first message from a second node at the first node, the first message comprising a second count associated with a number of subdivided portions of the second node's routing data; comparing the first count with the second count to produce first comparison results; designating the second node as a slave node based on the first comparison results; and sending a second message to the second node if the second node is designated as a slave node, where the second message comprises a digest associated with the routing data stored at the first node.

SHIRAKAWA does not disclose or suggest any of the features recited in Applicants' claim 10. The Office Action (pg. 2) relies on the same paragraphs of SHIRAKAWA, as cited with respect to claim 1, for allegedly disclosing the features of claim 10. As discussed above with respect to claim 1, the most relevant portions of the numerous paragraphs of SHIRAKAWA relied on by the Office Action disclose the processing of packets at a single node based on digest information generated for each of the packets. SHIRAKAWA, however, does not disclose, suggest, or have anything to do with designating a node as a slave node, as recited in claim 10. SHIRAKAWA, thus, does not disclose or suggest subdividing routing data stored at a first node into multiple portions; counting the number of multiple portions to produce a first count; receiving a first message from a second node at the first node, the first message comprising a second count associated with a number of subdivided portions of the second node's routing data; comparing the first count with the second count to produce first comparison results; designating the second node as a slave node based on the first comparison results; and sending a second message to the second node if the second node is

designated as a slave node, where the second message comprises a digest associated with the routing data stored at the first node, as recited in claim 10.

Since SHIRAKAWA does not disclose or suggest each and every feature of claim 10, SHIRAKAWA cannot anticipate claim 10. Withdrawal of the rejection of claim 10 is, therefore, requested.

Claims 11-16 depend from claim 10. These claims are not anticipated by SHIRAKAWA for at least the reasons set forth above with respect to claim 10. Furthermore, these claims recite additional features not disclosed or suggested by SHIRAKAWA. For example, claim 11 recites wherein the first message further comprises a digest associated with routing data stored at the second node. As a further example, claim 12 recites performing a function to produce the digest, where the digest produced by the function has substantially less data than the routing data stored at the first node. As another example, claim 14 recites designating the first node as a master node based on the first comparison results. As an additional example, claim 15 recites subdividing each of the multiple portions into multiple sub-portions and performing the function on each of the multiple sub-portions to produce multiple digests. As yet another example, claim 16 recites sending a third message to the second node, where the third message comprises the multiple digests.

In rejecting these claims, the Office Action relies on the same sections of SHIRAKAWA, cited with respect to the rejection of claim 1, that span dozens of paragraphs and several pages. However, after reviewing the extensive sections of SHIRAKAWA cited by the Office Action, Applicants submit that these sections do not disclose, or even suggest, the above-noted features of claims 11, 12 and 14-16. If the Examiner persists in maintaining the rejection of these claims, Applicants respectfully request that the Examiner specifically point out where SHIRAKAWA allegedly discloses the above-noted features of claims 11, 12 and 14-16. Absent such a showing, Applicants request that the rejection of claims 11, 12 and 14-16 be withdrawn for at least these additional reasons.

Independent claim 17 recites similar features to (though possibly having different scope than) claim 10. Claim 17, therefore, is not anticipated by SHIRAKAWA for similar reasons to those set forth above with respect to claim 10.

Independent claim 18 recites a method of using database digests to synchronize routing data between a first node and a second node in a network that includes storing first routing data at the first node; storing second routing data at the second node; performing, at the first node, a function on a portion of the first routing data, where the function produces a database digest that has substantially less data than the portion of the first routing data; and sending the database digest to the second node to synchronize the first routing data with the second routing data.

SHIRAKAWA does not disclose or suggest the combination of features recited in Applicants' claim 18. For example, SHIRAKAWA does not disclose or suggest, among other features, sending a database digest to a second node to synchronize the first routing data with the second routing data, as recited in claim 18. The Office Action (pg. 2) relies on the same paragraphs of SHIRAKAWA, as cited with respect to claim 1, for allegedly disclosing the features of claim 18. As discussed above with respect to claim 1, the most relevant portions of the numerous paragraphs of SHIRAKAWA relied on by the Office Action disclose the processing of packets at a single node based on digest information generated for each of the packets. SHIRAKAWA, however, does not disclose, suggest, or have anything to do with sending a database digest to a second node to synchronize the first routing data with the second routing data, as recited in claim 18.

Since SHIRAKAWA does not disclose or suggest each and every feature of claim 18, SHIRAKAWA cannot anticipate claim 18. Withdrawal of the rejection of claim 18 is, therefore, requested.

Claims 19-23 depend from claim 18. These claims are not anticipated by SHIRAKAWA for at least the reasons set forth above with respect to claim 18. Furthermore, these claims recite additional features not disclosed or suggested by SHIRAKAWA. For example, claim 20 recites receiving a first acknowledgment message from the first node based on the database digest, where the acknowledgment message indicates whether the second routing data is synchronized with the first routing data. As a further example, claim 21 recites subdividing the portion of the first routing data into multiple subportions and performing the function on each of the multiple sub-portions to produce multiple database digests. As another example, claim 22 recites sending the multiple database digests to the second node to synchronize the first routing data with the second routing

data. As an additional example, claim 23 recites receiving a second acknowledgment message from the second node based on the multiple database digests, where the second acknowledgment message indicates whether the multiple sub-portions are synchronized with corresponding sub-portions of the second routing data.

In rejecting these claims, the Office Action relies on the same sections of SHIRAKAWA, cited with respect to the rejection of claim 1, that span dozens of paragraphs and several pages. However, after reviewing the extensive sections of SHIRAKAWA cited by the Office Action, Applicants submit that these sections do not disclose, or even suggest, any of the above-noted features of claims 20-23. If the Examiner persists in maintaining the rejection of these claims, Applicants respectfully request that the Examiner specifically point out where SHIRAKAWA allegedly discloses the above-noted features of claims 20-23. Absent such a showing, Applicants request that the rejection of claims 20-23 be withdrawn for at least these additional reasons.

Independent claims 24 and 28 recite similar features to (though possibly having different scope than) claim 18. Claims 24 and 28, therefore, are not anticipated by SHIRAKAWA for similar reasons to those set forth above with respect to claim 18.

Independent claim 29 recites a method of synchronizing data with another node in a network that includes performing a function on at least a portion of the data to produce a first digest, where the first digest comprises substantially less data than the at least a portion of the data; receiving a second digest from the other node; comparing the first and second digests to determine whether they are identical to produce first comparison results; and exchanging a portion of the data based on the first comparison results.

SHIRAKAWA does not disclose or suggest the combination of features recited in Applicants' claim 29. For example, SHIRAKAWA does not disclose or suggest, among other features, comparing first and second digests to determine whether they are identical to produce first comparison results and exchanging a portion of the data based on the first comparison results, as recited in claim 29. The Office Action (pg. 2) relies on the same paragraphs of SHIRAKAWA, as cited with respect to claim 1, for allegedly disclosing the features of claim 29. As discussed above with respect to claim 1, the most relevant portions of the numerous paragraphs of SHIRAKAWA

relied on by the Office Action disclose the processing of packets at a single node based on digest information generated for each of the packets. SHIRAKAWA, however, does not disclose, suggest, or have anything to do with comparing first and second digests to determine whether they are identical to produce first comparison results and exchanging a portion of the data based on the first comparison results, as recited in claim 29.

Since SHIRAKAWA does not disclose or suggest each and every feature of claim 29, SHIRAKAWA cannot anticipate claim 29. Withdrawal of the rejection of claim 29 is, therefore, requested.

Claims 30-35 depend from claim 29. These claims are not anticipated by SHIRAKAWA for at least the reasons set forth above with respect to claim 29. Furthermore, these claims recite additional features not disclosed or suggested by SHIRAKAWA. For example, claim 31 recites wherein the other node performs the function on a corresponding at least a portion of the data stored at the other node to produce the second digest. As another example, claim 32 recites wherein the data comprises Open Shortest Path First (OSPF) route advertisements. As a further example, claim 33 recites receiving multiple third digests from the other node, where the multiple third digests identify multiple sub-portions of the data stored at the other node. As an additional example, claim 34 recites performing the function on corresponding sub-portions of the data that is locally stored to produce multiple local digests. As yet another example, claim 35 recites comparing the multiple local digests with the multiple third digests to produce second comparison results and exchanging further portions of the data based on the second comparison results.

In rejecting these claims, the Office Action relies on the same sections of SHIRAKAWA, cited with respect to the rejection of claim 1, that span dozens of paragraphs and several pages. However, after reviewing the extensive sections of SHIRAKAWA cited by the Office Action, Applicants submit that these sections do not disclose, or even suggest, any of the above-noted features of claims 31-35. If the Examiner persists in maintaining the rejection of these claims, Applicants respectfully request that the Examiner specifically point out where SHIRAKAWA allegedly discloses the above-noted features of claims 31-35. Absent such a showing, Applicants request that the rejection of claims 31-35 be withdrawn for at least these additional reasons.

Independent claim 36 recites a method of using database digests to synchronize data between a first node and a second node in a network that includes storing first data at the first node; storing second data at the second node; performing, at the first node, a function on a portion of the first data, where the function produces a database digest that has substantially less data than the portion of the first data; and sending the database digest to the second node to synchronize the first data with the second data.

SHIRAKAWA does not disclose or suggest the combination of features recited in Applicants' claim 36. For example, SHIRAKAWA does not disclose or suggest, among other features, sending the database digest to the second node to synchronize the first data with the second data, as recited in claim 36. The Office Action (pg. 2) relies on the same paragraphs of SHIRAKAWA, as cited with respect to claim 1, for allegedly disclosing the features of claim 36. As discussed above with respect to claim 1, the most relevant portions of the numerous paragraphs of SHIRAKAWA relied on by the Office Action disclose the processing of packets at a single node based on digest information generated for each of the packets. SHIRAKAWA, however, does not disclose, suggest, or have anything to do with sending the database digest to the second node to synchronize the first data with the second data, as recited in claim 36.

Since SHIRAKAWA does not disclose or suggest each and every feature of claim 36, SHIRAKAWA cannot anticipate claim 36. Withdrawal of the rejection of claim 36 is, therefore, requested.

Claims 37-41 depend from claim 36. These claims are not anticipated by SHIRAKAWA for at least the reasons set forth above with respect to claim 36. Furthermore, these claims recite additional features not disclosed or suggested by SHIRAKAWA. For example, claim 38 recites receiving a first acknowledgment message from the first node based on the database digest, where the acknowledgment message indicates whether the second data is synchronized with the first data. As a further example, claim 39 recites subdividing the portion of the first data into multiple subportions and performing the function on each of the multiple sub-portions to produce multiple database digests. As an additional example, claim 40 recites sending the multiple database digests to the second node to synchronize the first data with the second data. As yet another example, claim

41 recites receiving a second acknowledgment message from the second node based on the multiple database digests, where the second acknowledgment message indicates whether the multiple sub-portions are synchronized with corresponding sub-portions of the second data.

In rejecting these claims, the Office Action relies on the same sections of SHIRAKAWA, cited with respect to the rejection of claim 1, that span dozens of paragraphs and several pages. However, after reviewing the extensive sections of SHIRAKAWA cited by the Office Action, Applicants submit that these sections do not disclose, or even suggest, any of the above-noted features of claims 38-41. If the Examiner persists in maintaining the rejection of these claims, Applicants respectfully request that the Examiner specifically point out where SHIRAKAWA allegedly discloses the above-noted features of claims 38-41. Absent such a showing, Applicants request that the rejection of claims 38-41 be withdrawn for at least these additional reasons.

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-1945, under Order No. BBNT-P02-250 from which the undersigned is authorized to draw.

Dated: April 19, 2007

Respectfully submitted,

By _____

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